REMARKS

Reconsideration of the above identified application in view of the preceding amendments and following remarks is respectfully requested.

Claims 21-34 are pending in this application. By this Amendment, Applicants have cancelled Claims 1-20 without prejudice and added new Claims 21-34. The claim amendments were made to more precisely define the invention in accordance with 35 U.S.C. 112, paragraph 2. These amendments have not been necessitated by the need to distinguish the present invention from any prior art. It is respectfully submitted that no new matter has been introduced by these amendments, as support therefor is found throughout the specification and drawings.

In the Office Action, the Examiner objected to the Figure 7 of the drawings. Appropriate correction is enclosed and therefore, withdrawal of the objection is respectfully requested.

The specification was objected to under 35 U.S.C. §112 as not clear, concise and exact. In this regard, a substitute specification under 37 C.F.R. §1.25(a) was required. The Abstract was also objected to under MPEP §608.01(b). Accordingly, a substitute specification is enclosed to overcome the objections and therefore, withdrawal of the objections is respectfully requested.

Claims 1-20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1-20 have been canceled and therefore, withdrawal of the rejection is respectfully requested.

In the Office Action, Claims 1, 2, 7-9 and 17-20 were rejected under 35 U.S.C. § 103 (a) over U.S. Patent No. 5,974,448 to Yamauchi et al. in view of U.S. Patent No. 6,615,241 to Miller et al. Although these claims have been canceled to obviate the rejections, the cited combination will be addressed with respect to the new claims.

Yamauchi et al. show a method for automatically transferring electronic mail (e-mail) using the destination as a triggering keyword. A mail server 1 runs a mail handler program 2 to execute the method. A memory 3 stores the automatic transfer destination name 3, the system address book 5, the user address book 6 and the users mailboxes 7. The system address book 5 and the user address book 6 store records that correlate login names (i.e., mail addresses) with destination names. Based on the

address books 6, 7, the destination names in the "To:" field are converted into mail addresses. As shown best in Figure 5 at steps S14-S17, if a destination name matches the keyword selected by the system manager, the mail server 1 automatically transfers the e-mail to a corresponding automatic destination transfer name. As a result, administration of electronic mail transfer is easily managed such as, for example, when an employee will be on vacation.

Miller et al. disclose a method for efficiently storing a single email message by linking the single email message with a plurality of correspondents rather than storing a plurality of copies of the single email message. The method of Miller et al. requires a mail host 105 (e.g., a mail server) that receives incoming messages. The mail host 105 compares the sender of incoming messages to a predefined list of junk mail senders. If a match exists, the associated message is discarded. If no match exists, the recipient is presented with the sender information to allow for deletion of the associated message from unrecognized senders prior to delivery (see col. 9, lns. 42-50). When composing e-mails, the user can open a window and select from a plurality of available recipients to create a message for delivery to a plurality of recipients. As shown in Figure 7, a check box in area 703 must be selected for each recipient.

There is nothing in either of these references that discloses or suggests, either alone or in combination, in whole or in part, the device defined by the Claims of the subject application. Regarding Claim 21, there is nothing in either Yamauchi et al. or Miller et al. which discloses or suggests, a method for an composing electronic mail message including the steps of composing a body of a message, selecting registrant data for a prescribed area, selecting attributes and a setting for association with the body of the message, the attributes and the setting for determining a list of recipients of the message according to the registrant data in the prescribed area, and sending the message to the list of recipients. Neither of the cited references teach this feature of avoiding unwanted electronic mail by allowing the message creator to easily and efficiently control the list of recipients of the message.

Claim 24 recites, *inter alia*, a server for processing electronic mail having a memory and a processor for running an instruction set. The processor is operative to read a setting and a group name from attribute information associated with an electronic mail message, and determine the plurality of registrants associated with the group

name. The processor can also detect destinations in a prescribed region of the electronic mail message, classify the plurality of registrants into a first group associated with the group name and a second group not associated with the group name to determine a list of recipients for the electronic mail message according to a rule associated with the setting. Neither Yamauchi et al. nor Miller et al. discloses or suggests, either alone or in combination, in whole or in part, such a server that will facilitate easy creation of an appropriate list of recipients for an electronic mail message.

Regarding Claim 30, it includes similar recitations to that of Claim 21. Thus, Claim 30 distinguishes over the cited references for similar reasons.

In view of the above, Claims 21-34 of the subject application are not rendered obvious by the combination of references cited by the Examiner, and withdrawal of the rejection under 35 U.S.C. §103 (a) is respectfully requested.

In the Office Action, Claims 3 and 4 were rejected under 35 U.S.C. § 103 (a) over U.S. Patent No. 5,974,448 to Yamauchi et al. in view of U.S. Patent No. 6,615,241 to Miller et al. and U.S. Patent No. 6,023,723 to McCormick et al. Although these claims have been canceled to obviate the rejections, the cited combination will be addressed with respect to the new claims.

McCormick et al. disclose a method for filtering junk e-mails. The user creates a first filter to recognize junk e-mails and a second filter to recognize e-mails to be delivered. Any e-mails not caught by either of the filters are sent to a temporary location for user review.

It is respectfully submitted that McCormick et al. do not overcome the deficiencies of Yamauchi et al. and Miller et al., as noted above. In particular, none of the cited references disclose or suggest, either alone or in combination, in whole or in part, a system or method that recognizes, let alone addresses, a need to prevent e-mail from being sent to recipients improperly. None of the reference show a system that allows a user to easily create an appropriate list of recipients.

In the Office Action, Claims 5, 6 and 10-16 were rejected under 35 U.S.C. § 103 (a) over U.S. Patent No. 5,974,448 to Yamauchi et al. in view of U.S. Patent No. 6,615,241 to Miller et al. and U.S. Patent No. 6,282,565 to Shaw et al. Although these claims have

been canceled to obviate the rejections, the cited combination will be addressed with respect to the new claims.

Shaw et al. disclose an enterprise email management system for helping large corporations respond to large quantities of incoming emails. The corporation operates an incoming email server 110. A set of rules, configured by the system administrator, are applied to determine how the incoming email messages are processed. The rules are applied at the server level rather than at the client level. The rules may direct that some of the incoming email messages are dropped, responded to automatically, redirected, acknowledged, not answered and the like. As a result, the corporation does not need to employ a large number of people to respond to a large number of incoming email messages.

It is respectfully submitted that Shaw et al. do not overcome the deficiencies of Yamauchi et al. and Miller et al., as noted above. In particular, none of the cited references disclose or suggest, either alone or in combination, in whole or in part, a system or method that recognizes, let alone addresses, a need to prevent e-mail from being sent to recipients improperly. None of the reference show a system that allows a user to easily create an appropriate list of recipients.

Any additional fees or overpayments due as a result of filing the present paper may be applied to Deposit Account No. 04-1105. It is respectfully submitted that all of the claims now remaining in this application, namely Claims 21-34, are in condition for allowance, and such action is earnestly solicited.

If after reviewing this amendment, the Examiner believes that a telephone interview would facilitate the resolution of any remaining matters the undersigned attorney may be contacted at the number set forth herein below.

Dated: July 26, 2004

Respectfully submitted,

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Attachments

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~~SPECIFICATION~~

~~TITLE OF THE INVENTION~~

Electronic mail apparatus

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to an electronic mail apparatus that manages the addresses of destinations of electronic mail (hereinafter referred to as "e-mail") and automatically judges a name and transmission method for each destination at the time of transmission.

2. Description of the Related Art

E-mail is a ~~one of~~ conventional ~~methods~~ for communication between information processing apparatuses connected to a network. P, ~~and~~ personal computers and the like ~~etc.~~ are used ~~as apparatuses~~ for transmitting and receiving e-mails (i.e., e-mail apparatuses). In transmitting an e-mail message, it is necessary to write the address of a destination in the e-mail message to be transmitted. A user may input an address through a keyboard in generating an e-mail message to be transmitted. However, in the case of a destination to which a user frequently transmits e-mail messages, not only it is a heavy load for the user to input the e-mail address of the destination in generating each e-mail message to be transmitted, but also it is impossible to prevent a transmission error due to erroneous input of the

address.

In view of the above, conventional e-mail apparatuses have a function of registering destination information (such as in a destination table). In the destination table, in which the addresses and names of destinations are correlated with each other, and thereby upon designating a destination from among the registered destinations, the address of the designated destination is automatically added to an e-mail to be transmitted.

Recently, a generated e-mail, however, is often transmitted to a plurality of destinations, and accordingly e-mail apparatuses in which destinations of e-mail are managed in groups have been mainstreamed. An e-mail apparatus in which destinations of an e-mail are managed in groups is provided with the above-mentioned destination table. A and additionally, a group table stores in which a group identification name and one or a plurality of destination names registered in the destination table are registered. By designating a group of destinations of an e-mail message, the address of every destination which is registered as a member of the designated group is added to an e-mail itself and the e-mail message is transmitted to every destination.

Further, the following e-mail apparatuses have been proposed.

(1) An apparatus, disclosed in Japanese Unexamined Patent Publication JP-A 5-219103 (1993), shows in which destinations

of e-mail beingare managed in groups. R and registrants of a
group are classified, based on exclusion information that is
set before transmitting an e-mail message, into ones to whom
the e-mail message needs to be transmitted and ones to whom the
e-mail message need not be transmitted. The e-mail message is
transmitted to only the registrants to whom it needs to be
transmitted (i.e., the e-mail is not transmitted to the
registrants to whom it need not be transmitted).

(2) An apparatus, disclosed in Japanese Unexamined Patent
Publication JP-A 8-316983 (1996), showsin which a function of
registering a table in which keywords and destinations are
correlated with each other is provided. A person to whom an
e-mail message needs to be transmitted is determined
automatically based on a keyword that is included in the e-mail
message, and the e-mail message is transmitted to the person
thus determined.

(3) An apparatus, disclosed in Japanese Unexamined Patent
Publication JP-A 11-212884 (1999), showsin which an e-mail
message with an attachment file is transmitted to a particular
destination among a plurality of destinations to whom the e-mail
message needs to be transmitted.

In the apparatus (1), however, since exclusion information
is inputted by a user, the exclusion information cannot be
prevented from being erroneously inputted by a user.
Accordingly the apparatus has a high possibility to transmit

an e-mail message to a person to whom it need not be transmitted or to fail to transmit the e-mail message to a person to whom it needs to be transmitted. There is another problem that since a user needs to input exclusion information, the apparatus needs relatively high expenditures of time and labor in e-mail transmission and is inferior in operability.

In the apparatus (2), since the destination of an e-mail message is determined based on a keyword that is included in the e-mail message, a user needs to generate an e-mail message in consideration of the destination. As a result, ~~and hence~~ more time and labor are needed to generate the e-mail message.

In the apparatus (3), a user specifies, for each person, whether to add an attachment file. Therefore, the apparatus has a high possibility to transmit, due to an erroneous specification, an attachment file to a person to whom it need not be transmitted or to fail to transmit the attachment file to a person to whom it needs to be transmitted. There is another problem that since a user needs to specify, for each person, whether to add an attachment file, the apparatus needs relatively high expenditures of time and labor in e-mail transmission and is inferior in operability.

SUMMARY

An object of the present invention is to provide an e-mail apparatus capable of enhancing ease of operation and preventing

an e-mail transmission error.

In one embodiment, a ————method composes electronic mail message including the steps of composing a body of a message, selecting registrant data for a prescribed area, selecting attributes and a setting for association with the body of the message, the attributes and the setting for determining a list of recipients of the message according to the registrant data in the prescribed area, and sending the message to the list of recipients.

In another embodiment, a server processes electronic mail in communication with clients over a distributed computing network. The server includes a memory storing an instruction set, templates, rules for settings, group names associated with a plurality of registrants, and mail addresses related to the plurality of registrants as well as a processor for running the instruction set. The processor is in communication with the memory and the distributed computing network. The processor is operative to i) read a setting and a group name from attribute information associated with an electronic mail message, ii) determine the plurality of registrants associated with the group name, iii) detect destinations in a prescribed region of the electronic mail message, iv) classify the plurality of registrants into a first group associated with the group name and a second group not associated with the group name, v) determine a list of recipients for the electronic mail message

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according to a rule associated with the setting, the rule being for determining whether the first and second groups receive the electronic mail message, and v) transmit the electronic mail message to the list of recipients.

In a preferred embodiment, an e-mail apparatus includes a storage section for storing a destination table. The destination table stores destination records, each destination record has an address of an e-mail destination and a destination notation. The storage section also includes a group table in which group records of an identification name of a group and one or a plurality of destinations. The e-mail apparatus further includes a control section having for classifying destinations. When a group is designated as a destination of an e-mail message, the control section classifies the designated group into destinations who are listed in the e-mail message to be transmitted and destinations who are not. Based upon the classification, the control section transmits the e-mail message to the appropriate recipients. ~~To attain the above object, the invention provides an e-mail apparatus comprising:~~

~~a storage section for storing a destination table in which destination records in each of which an address of an e-mail destination and a destination notation are correlated with each other are registered and a group table in which group records in each of which an identification name of a group and one or a plurality of destinations are correlated with each other are~~

registered; and

a control section having a destination classification function of classifying, when a group is designated as destinations of an e-mail message, destinations correlated with the designated group into destinations who are listed in the e-mail message to be transmitted and destinations who are not, and a transmission function of transmitting the e-mail message based on the classification by the destination classification function.

In this configuration, the destinations (i.e., the registrants of the group) who are correlated with a group that has been designated as destinations of an e-mail message to be transmitted are classified depending on whether they are listed in the e-mail message and the e-mail message is transmitted based on a classification result.

Where a setting is so made that an e-mail message is not transmitted to a registrant of a designated group who is not listed in the e-mail message, transmission of an e-mail message to a person to whom it need not be transmitted is avoided by a user's refraining from writing (inputting) the name of the person in generating the e-mail message. The e-mail is transmitted reliably to persons whose names are listed in the e-mail message. In this manner, depending on whether a user writes a destination name in an e-mail message to be transmitted, the e-mail message can reliably be transmitted to persons to

whom it needs to be transmitted and the e-mail message is not
transmitted to persons to whom it need not be transmitted. Since
writing names of persons to whom an e-mail message needs to be
transmitted is an act that is done usually, it does not increase
the load of a user.

In another embodiment, the invention it is preferable that
the control section further has a function of designating a group
of destinations as designations of the e-mail message based on
attribute information of the e-mail message.

PreferablyAccording to the invention, the group of
destinations is designated automatically based on attribute
information of the e-mail message to be transmitted. Therefore,
a burden imposed onto a user is more reduced.

Itn the invention it is preferable that the control section
prohibit transmission of the e-mail message to the destinations
which are listed in the e-mail message.

Itn the invention it is preferable that the destination
classification function includes a function of subclassifying
the destinations which are listed in the e-mail message to be
transmitted based on a preset condition.

In another embodimentAccording to of the invention, for
example, it is possible to transmit meeting minutes to only
persons who were absent from the meeting. Therefore,
destinations are determined automatically in accordance with
the property of an e-mail message to be transmitted and

operability of the apparatus is more enhanced.

In a preferred embodiment, ~~the invention it is preferable~~ ~~that~~ the destination classification function performs ~~is a~~ ~~function of performing~~ the classification depending on whether the destinations are listed in a prescribed region of the e-mail message to be transmitted.

~~————~~Usually, the names of persons to whom an e-mail message needs to be transmitted are written at a beginning part of the e-mail message. Therefore, the classification may be performed depending on whether destinations are listed in this region.

Preferably, ~~In the invention it is preferable that the~~ ~~transmission function includes a function of transmitting, when~~ ~~a destination which is not correlated with the designated group~~ ~~is listed in the e-mail message to be transmitted, the e-mail~~ ~~message is also transmitted to the destination.~~

~~————According to the invention,~~ even when a destination which is not correlated with a designated group is listed in an e-mail message, the e-mail message is also transmitted to the destination. Therefore, a user can transmit an e-mail message also to a person who does not belong to the designated group, merely by writing his name.

~~In the invention it is preferable that the storage section~~ ~~has a mail storage area for storing transmitted e-mails, and~~ ~~the transmission function includes a function of attaching, when~~ ~~transmitting the e-mail message to the destination which is not~~

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correlated with the designated group, to the e-mail message to
be transmitted, e-mail messages which are stored in the mail
storage area and were transmitted to the destinations of the
designated group. In a further embodiment, the storage section
has a mail storage area for storing transmitted e-mails. When
transmitting the e-mail message to the destination, e-mail
messages stored in the mail storage area are attached to the
outgoing message.

According to a preferred embodiment the invention, when
an e-mail message is transmitted to a person who does not belong
to a designated group, e-mail messages that were transmitted
to the registrants of the group in the past can be attached to
the e-mail message.

In a preferred embodiment, the invention it is preferable
that when a destination which is not correlated with the
designated group is listed in the e-mail message to be transmitted,
the control section has a function of executing, when a
destination which is not correlated with the designated group
is listed in the e-mail message to be transmitted, a process
of inquiring of a user whether to register the destination as
a member of the designated group.

According to the invention another embodiment, when a
destination which is not correlated with a designated group is
listed in an e-mail message, an inquiry is made about whether
to register the destination as a member of the designated group.

Therefore, an individual who has newly joined a group can be registered easily.

It should be appreciated that the present invention can be implemented and utilized in numerous ways, including without limitation as a process, an apparatus, a system, a device, a method for applications now known and later developed or a computer readable medium. These and other unique features of the system disclosed herein will become more readily apparent from the following description and the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Other and further objects, features, and advantages of the invention will be more explicit from the following detailed description taken with reference to the drawings wherein:

Fig. 1 is a block diagram showing the configuration of an e-mail apparatus according to a first embodiment of the invention;

Fig. 2 shows a destination table provided in the e-mail apparatus according to the first embodiment of the invention;

Fig. 3 shows a group table provided in the e-mail apparatus according to the first embodiment of the invention;

Fig. 4 shows a template of meeting minutes;

Fig. 5 shows the structure of a region to which attributes of a file are to be inputted;

Figs. 6A and 6B show an example of a generated e-mail

message;

Fig. 7 is a flowchart showing a process executed by the e-mail apparatus according to the first embodiment of the invention;

Fig. 8 shows another example of a generated e-mail message; and

Fig. 9 shows an example display on a display section of an e-mail apparatus according to a second embodiment of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Now referring to the drawings, preferred embodiments of the invention are described below.

Fig. 1 is a block diagram showing the configuration of an e-mail apparatus according to an embodiment of the invention. An e-mail apparatus 1 is provided with a control section 2 for controlling the operation of a main body, a storage section 3 having a destination table 11 and a group table 12 (described later), a document template storage area 13 in which templates of various documents such as meeting minutes are registered, a transmitted mail storage area 14 for storing transmitted e-mail etc., and other areas, an input section 4 having a mouse, a keyboard, etc., a display section 5 for performing display corresponding to an input manipulation on the input section 4, and a communication section 6 for controlling communication with a

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network.

As shown in Fig. 2, a destination table 11 stores destination records 11a having~~in each of which~~ destination notations such as, without limitation, names and titles and a mail address (hereinafter referred to merely as "address"). The ~~are correlated with each other are registered in the~~ destination table 11 ~~that~~ is stored in the storage section 3. The term "destination" as used herein means a name or the like that enables identification of an individual. Preferably,~~Not only a representative notation but also~~ other notations in each destination record 11a enabl~~ing~~e identification of an individual that can be registered~~in each destination record 11a~~. For example, "Hajime Suzuki," "H. Suzuki," ~~etc.~~and other variations of this name can be registered as other notations correlated with~~enabling identification of~~ "sub-section manager Suzuki" ~~can be registered~~in a destination record 11a having "sub-section manager Suzuki" as a representative notation.

As shown in Fig. 3, group records 12a contain~~in each of which~~ the name of the group and the representative notations of individuals (registrants) belonging to the group ~~are correlated with each other are registered~~in the group table 12. Either a single person or a plurality of persons may be registered in each group. Templates of various documents are stored in the document template storage area 13. For example, as shown in Fig. 4, a meeting minutes template having fields

in which to write a subject, a date, a place, attendants, meeting results, etc. can be stored in the document template storage area 13. A user can generate an e-mail message to be transmitted by using any of those templates.

As shown in Fig. 5, an e-mail message that has been generated by the e-mail apparatus according to this embodiment is provided with a region where attribute information or data such as a file name and a group name are to be inputted. A user can generate a template freely and a generated template can be stored in the document template storage area 13. An e-mail message can also be generated according to a form that is not stored as a template.

The operation of the e-mail apparatus 1 according to this embodiment will be hereinafter described. A user who wants to transmit an e-mail message generates an e-mail body. This may be done by using either a template stored in the document template storage area 13 or a unique form devised by the user. At this time, the user also inputs attribute information (a title name, a group name, etc.) of the generated e-mail message. The e-mail apparatus 1 may be so configured that a group name can be inputted by designating a group name that is registered in the group table 12. Also, the e-mail apparatus 1 may be so configured that a group name (or a destination name) is inputted automatically in a case where an e-mail massage is generated by using a template that is stored in the document template storage area 13. Specifically, ~~this is done by storing,~~ in the document template

storage area 13, a template may contain in which a group name is inputted as attribute information.

Figs. 6A and 6B show an example e-mail message generated by a user. Fig. 6A shows the attribute information of the generated e-mail message and Fig. 6B shows an e-mail body. In the e-mail message of Figs. 6A and 6B, "Leader meeting" is inputted as a group name (attribute information).

When the user who has completed the generation of the e-mail message makes, through the input section 4, an input that commands transmission of the e-mail massage, a process of transmitting the generated e-mail message is executed. Fig. 7 is a flowchart showing a mail transmission process of the e-mail apparatus 1 according to this embodiment. The e-mail apparatus 1 reads out a group name (in this example of FIGS. 6A and 6B, "Leader meeting") from attribute information at step n1. At step n2, the e-mail apparatus 1 and detects registrants of the group from the group table 11 at step n2.

At step n3, the e-mail apparatus 1 detects destinations that are listed in a prescribed region of the e-mail to be transmitted (i.e., the e-mail that has been generated by the user).

The prescribed region may be set on an e-mail message basis. For example, a region where to input information indicating the prescribed region may be provided in the attribute information. For example, in the case of the meeting minutes of Figs. 6A and

6B, the region where to write attendant names may be made the prescribed region. The registrants of "Leader meeting" are four persons of "Sub-section manager Suzuki," "Sub-section manager Tanaka," and "Chief Nakamura," and "Chief Yamamoto." In the meeting minutes of Figs. 6A and 6B, only three persons of "Sub-section manager Suzuki," "Sub-section manager Tanaka," and "Chief Yamamoto" are written as attendants but "Chief Nakamura" is not written because he was absent.

At step n4, the e-mail apparatus 1 classifies the registrants of the group that were detected at step n3 into persons (i.e., destinations) who are listed in the prescribed region of the e-mail message and persons who are not. In this example, at step n4, the e-mail apparatus 1 makes classification into the three persons of "Sub-section manager Suzuki," "Sub-section manager Tanaka," and "Chief Yamamoto" and the single person of "Chief Nakamura." At step n5, the e-mail apparatus 1 transmits the e-mail message based on the classification result of step n4.

At step n5, an e-mail transmission method etc. may be determined in accordance with the property of the e-mail message to be transmitted. Exemplary e-mail transmission methods are as follows.

(1) If the purpose of transmission of the e-mail message is confirmation of the contents of generated meeting minutes, the meeting minutes (e-mail message) need to be transmitted to

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attendants of the meeting but need not be transmitted to persons who were absent. In this case, a setting is possible that the e-mail message is transmitted to persons (i.e., destinations) who are listed in the prescribed region of the e-mail message and is not transmitted to the other persons (i.e., persons who were absent). With this setting, the transmission of the e-mail can be done automatically in such a manner that the e-mail message is transmitted to the three persons of "Sub-section manager Suzuki," "Sub-section manager Tanaka," and "Chief Yamamoto" who attended the meeting and is not transmitted to "Chief Nakamura" who was absent.

The address of a person to whom the e-mail should be transmitted is obtained by searching the destination table 11. The e-mail apparatus 1 according to this embodiment automatically adds, to the e-mail message, an address that has been acquired by searching the destination table 11.

(2) If meeting minutes were handed to attendants at the end of the meeting and the purpose of transmission of the e-mail message is to transmit the meeting minutes to persons who were absent, the meeting minutes (e-mail message) need not be transmitted to the attendants and need to be transmitted to the persons who were absent. In this case, a setting is possible that the e-mail message is not transmitted to the persons (destinations) who are listed in the prescribed region of the e-mail message and is transmitted to the other persons (i.e.,

the persons who were absent). With this setting, the
transmission of the e-mail message can be done automatically
in such a manner that the e-mail message is not transmitted to
the three persons of "Sub-section manager Suzuki," "Sub-section
manager Tanaka," and "Chief Yamamoto" who attended the meeting
and is transmitted to "Chief Nakamura" who was absent.

(3) Another setting is possible that the e-mail message
is transmitted as an original (To: transmission) to persons
(destinations) who are registrants of the group detected at step
n2 and are listed in the prescribed region of the e-mail message
detected at step n3 and the e-mail message is transmitted as
a copy (CC: transmission) to persons who are not listed in the
prescribed region of the e-mail message detected at step n3.
With this setting, in the example being considered, the
transmission can be done in such a manner that the e-mail message
is transmitted as an original to the three persons of "Sub-section
manager Suzuki," "Sub-section manager Tanaka," and "Chief
Yamamoto" who attended the meeting and is transmitted as a copy
to "Chief Nakamura" who was absent.

(4) If an attachment file was handed to attendants at the
time of a meeting, a setting is possible that the e-mail message
is transmitted without the attachment file to persons
(destinations) who are registrants of the group detected at step
n2 and are listed in the prescribed region of the e-mail message
detected at step n3 and the e-mail message is transmitted with

the attachment file to persons who are not listed in the prescribed region of the e-mail message detected at step n3. With this setting, the e-mail message is transmitted without an attachment file to the three persons of "Sub-section manager Suzuki," "Sub-section manager Tanaka," and "Chief Yamamoto" who attended the meeting and is transmitted with the attachment file to "Chief Nakamura" who was absent. That is, an attachment file can be transmitted to only persons who were absent and hence were not handed the attachment file.

(5) Still another setting is possible that the e-mail message is transmitted as BCC: transmission to a person (who is not necessarily a registrant of the group) who is listed in the prescribed region of the e-mail as a destination with a prescribed mark or notation such as "[written by]" or "[secretariat]." This setting allows even a person who has written meeting minutes, a secretariat, or the like to manage the meeting minutes.

The transmission-completed e-mail message is stored in the transmitted mail storage area 14.

Since as described above proper destinations and a proper transmission method (To:, CC:, or BCC: transmission, with or without an attachment file, etc.) vary in accordance with the property of an e-mail message to be transmitted, the e-mail apparatus 1 may be so configured as to allow a user to make one of settings (1)-(5) freely. For example, when a user has

commanded transmission of an e-mail message, ~~the e-mail apparatus~~ ~~1a picture that~~ inquires of the user which of settings (1)-(5) ~~should be effected may be displayed~~to select on the display section 5 ~~to urge the user to make a setting input~~. With this measure, the only manipulation that the user should perform is to select (i.e., designate) a setting and hence the load of the user is not increased.

Another embodiment of the invention will be described below. An e-mail apparatus 1 according to this embodiment is similar to the e-mail apparatus 1 according to the first embodiment and different from the latter in being additionally provided with a process that is executed when the name of a destination who is not a registrant of a designated group is written in the prescribed region of an e-mail message.

Specifically, when the name of a destination who is not a registrant of a designated group is written in the prescribed region of an e-mail message, the e-mail apparatus 1 acquires an address that is correlated with this destination by searching the destination table 11 and transmits the e-mail message to the acquired address. The e-mail apparatus 1 may be so configured that an e-mail transmission method (To:, CC:, or BCC: transmission or the like) suitable for the property of an e-mail message to be transmitted can be set.

For example, in the case of transmitting meeting minutes shown in Fig. 8, the above-described process allows the meeting

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minutes to be also transmitted to "Chief Takahashi" who is listed as an attendant but is not registered as a member of the group "Leader meeting." Therefore, the meeting minutes can be transmitted to "Chief Takahashi" in a situation that he attended the meeting as a guest or that he newly joined the group but the group table 12 has not been updated accordingly yet.

When the name of a destination who is not a registrant of a designated group is written in the prescribed region of an e-mail message, ~~as shown in Fig. 9~~ a picture (as shown in Fig. 9) that inquires of a user whether to register this destination as a member of the group may be displayed on the display section 5. At this time, if the user inputs an instruction to the effect that the destination should be registered as a member of the group, the destination is registered in the corresponding group record 12a. Therefore, when the members of a group have changed by, for example, addition of a new member, the group table 12 can be updated easily and ease of operation of a user is more enhanced. Further, as shown in Fig. 9, the picture may include a portion that inquires of the user whether materials that have been generated so far should be transmitted to the new member as attachments to the e-mail message. With this measure, the past materials of the group can be transmitted to the new member and hence the new member can easily recognize the past situations of the group. The past materials of the group are stored in the transmitted mail storage area 14.

In the above embodiments, all the destination names written in the e-mail message are representative notations. A similar operation is performed even if a destination name is a notation that is registered in a destination record 11a as not being a representative notation.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description and all changes which come within the meaning and the range of equivalency of the claims are therefore intended to be embraced therein.

WHAT IS CLAIMED IS:

1. An e-mail apparatus comprising:

a storage section for storing a destination table in which destination records in each of which an address of an e-mail destination and a destination notation are correlated with each other are registered and a group table in which group records in each of which an identification name of a group and one or a plurality of destinations are correlated with each other are registered; and

a control section having a destination classification function of classifying, when a group is designated as destinations of an e-mail message, destinations correlated with the designated group into destinations who are listed in the e-mail message to be transmitted and destinations who are not, and a transmission function of transmitting the e-mail message based on the classification by the destination classification function.

2. The e-mail apparatus of claim 1, wherein the control section further has a function of designating a group of destinations as designations of the e-mail message based on attribute information of the e-mail message.

3. The e-mail apparatus of claim 1, wherein the control section prohibit transmission of the e-mail message to the destinations

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which are listed in the e-mail message.

4.   The e-mail apparatus of claim 2, wherein the control section prohibit transmission of the e-mail message to the destinations which are listed in the e-mail message.

5.   The e-mail apparatus of claim 1, wherein the destination classification function includes a function of subclassifying the destinations which are listed in the e-mail message to be transmitted based on a preset condition.

6.   The e-mail apparatus of claim 2, wherein the destination classification function includes a function of subclassifying the destinations which are listed in the e-mail message to be transmitted based on a preset condition.

7.   The e-mail apparatus of claim 1, wherein the destination classification function is a function of performing the classification depending on whether the destinations are listed in a prescribed region of the e-mail message to be transmitted.

8.   The e-mail apparatus of claim 2, wherein the destination classification function is a function of performing the classification depending on whether the destinations are listed in a prescribed region of the e-mail message to be transmitted.

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9.   The e-mail apparatus of claim 3, wherein the destination classification function is a function of performing the classification depending on whether the destinations are listed in a prescribed region of the e-mail message to be transmitted.

10.   The e-mail apparatus of claim 1, wherein the transmission function includes a function of transmitting, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, the e-mail message is also transmitted to the destination.

11.   The e-mail apparatus of claim 2, wherein the transmission function includes a function of transmitting, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, the e-mail message is also transmitted to the destination.

12.   The e-mail apparatus of claim 3, wherein the transmission function includes a function of transmitting, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, the e-mail message is also transmitted to the destination.

13.   The e-mail apparatus of claim 7, wherein the transmission

function includes a function of transmitting, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, the e-mail message is also transmitted to the destination.

14. The e-mail apparatus of claim 10, wherein the storage section has a mail storage area for storing transmitted e-mails, and the transmission function includes a function of attaching, when transmitting the e-mail message to the destination which is not correlated with the designated group, to the e-mail message to be transmitted, e-mail messages which are stored in the mail storage area and were transmitted to the destinations of the designated group.

15. The e-mail apparatus of claim 11, wherein the storage section has a mail storage area for storing transmitted e-mails, and the transmission function includes a function of attaching, when transmitting the e-mail message to the destination which is not correlated with the designated group, to the e-mail message to be transmitted, e-mail messages which are stored in the mail storage area and were transmitted to the destinations of the designated group.

16. The e-mail apparatus of claim 12, wherein the storage section has a mail storage area for storing transmitted e-mails,

and the transmission function includes a function of attaching, when transmitting the e-mail message to the destination which is not correlated with the designated group, to the e-mail message to be transmitted, e-mail messages which are stored in the mail storage area and were transmitted to the destinations of the designated group.

17.   The e-mail apparatus of claim 1, wherein the control section has a function of executing, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, a process of inquiring of a user whether to register the destination as a member of the designated group.

18.   The e-mail apparatus of claim 2, wherein the control section has a function of executing, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, a process of inquiring of a user whether to register the destination as a member of the designated group.

19.   The e-mail apparatus of claim 3, wherein the control section has a function of executing, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, a process of inquiring of a user whether to register the destination as a member of the designated group.

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20. The e-mail apparatus of claim 7, wherein the control section has a function of executing, when a destination which is not correlated with the designated group is listed in the e-mail message to be transmitted, a process of inquiring of a user whether to register the destination as a member of the designated group.

ABSTRACT OF THE DISCLOSURE

~~It is intended to provide an~~ An e-mail apparatus ~~capable of~~ enhancing the ease of operation ~~and preventing an e-mail transmission error. One or a plurality of destinations which are registered so as to be correlated with a designated group that has been designated as e-mail destinations are classified depending on whether they are listed in an e-mail message to be transmitted.~~ . The e-mail messages are ~~is~~ transmitted based on ~~a~~ classification results to. ~~Therefore, classification into destinations to which an e-mail message needs be transmitted and destinations to which the e-mail message need not be transmitted can be performed automatically depending on whether they are listed in the e-mail message. The~~ reduce the load of a user ~~can thus be reduced.~~ The e-mail apparatus facilitates composing a body of a message, selecting registrant data for a prescribed area, selecting attributes and a setting for association with the body of the message, the attributes and the setting for determining a list of recipients of the message according to the registrant data in the prescribed area, and sending the message to the list of recipients.

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